40. A machine as claimed in claim 39, wherein the shielding member is hinged about an axis so as to be movable thereabout, there being provided on at least one side of the shielding member electric contacts interacting with other stationary electric contacts.

- 41. A machine as claimed in claim 39, wherein the magnet has a C-shaped structure including a closed side, and the shielding member being arranged to close at least partly a side of the magnet structure which is substantially opposite to the closed side while leaving remaining sides of the magnet structure at least partly open.
- 42. A machine as claimed in claim 39, wherein the magnet has two opposite poles defining a cavity therebetween, the poles connected to each other only in several small areas and more than one rigid shielding member being provided, the shielding members being cooperable for covering the whole perimeter of the cavity between the poles.
- 43. A machine as claimed in claim 42, wherein the shielding members are rigid and in non-electrical and non-mechanical contact with each other, and flexible shields are provided in an area between the shielding members, the shields being electrically conductive and connected both mechanically and electrically to the rigid shielding members.

- 44. A machine as claimed in claim 39, wherein areas that the shielding member leaves at least partially open are closed by additional shields which are removably fastened and electrically connected to the shielding member.
- 45. A machine as claimed in claim 39, wherein the magnet is C-shaped and comprises upper and lower horizontal poles interconnected by a vertical branch, sides associated with the poles and the branch defining a cavity, and the rigid shielding member having a U-shaped frame, with free ends of U- branches thereof being fastened to the opposite ends of a hinging axis arranged transverse to the vertical branch of the magnet.
- part thereof disposed substantially diametrically opposite to the hinging axis, an extension arranged to close the open side of the magnet, opposite to said vertical branch, the extension abutting on a side of the cavity of the magnet associated with the lower pole, there being provided an electric connection between the shield and said lower side.
- U-shaped member extends partly on the two opposite sides parallel to the branches of the frame.

48. A machine as claimed in claim 45, wherein the hinging axis is disposed at the same level as one of the two opposite sides of the magnet associated with one of the poles.

49. A machine as claimed in claim 39, wherein the magnet further comprises an electrically conductive case, and means for electrically connecting the electrically conductive case with the rigid shielding member being provided along the U-shaped oscillating frame.--